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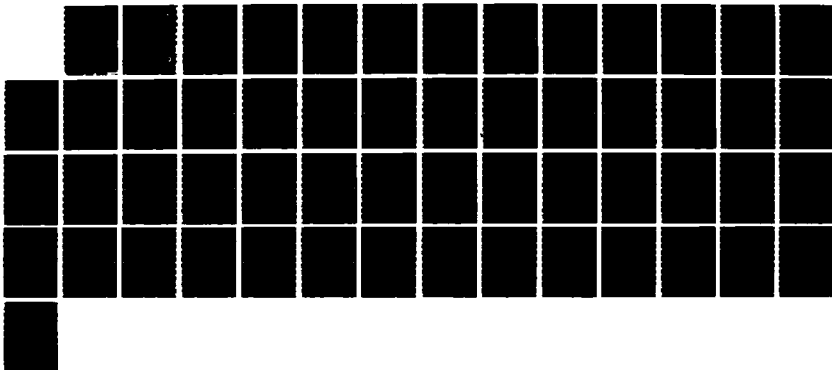
COMPUTER CENTER DEC VAXCLUSTER LIBRARIES- PROCFIL  
(PROCEDURSS)(U) DAVID W TAYLOR NAVAL SHIP RESEARCH AND  
DEVELOPMENT CENTER BET D V SOMMER MAY 86  
DTNSRDC/CMLD-TM-18-86-14

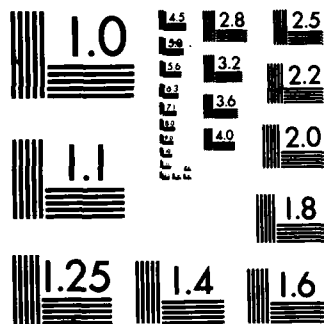
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TM-18-86-14

# DAVID W. TAYLOR NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER

Bethesda, Maryland 20084



COMPUTER CENTER  
VAXCLUSTER LIBRARIES/PROCFIL  
(PROCEDURES)

by

DAVID V. SOMMER

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Computation, Mathematics and Logistics Department  
Technical Memorandum

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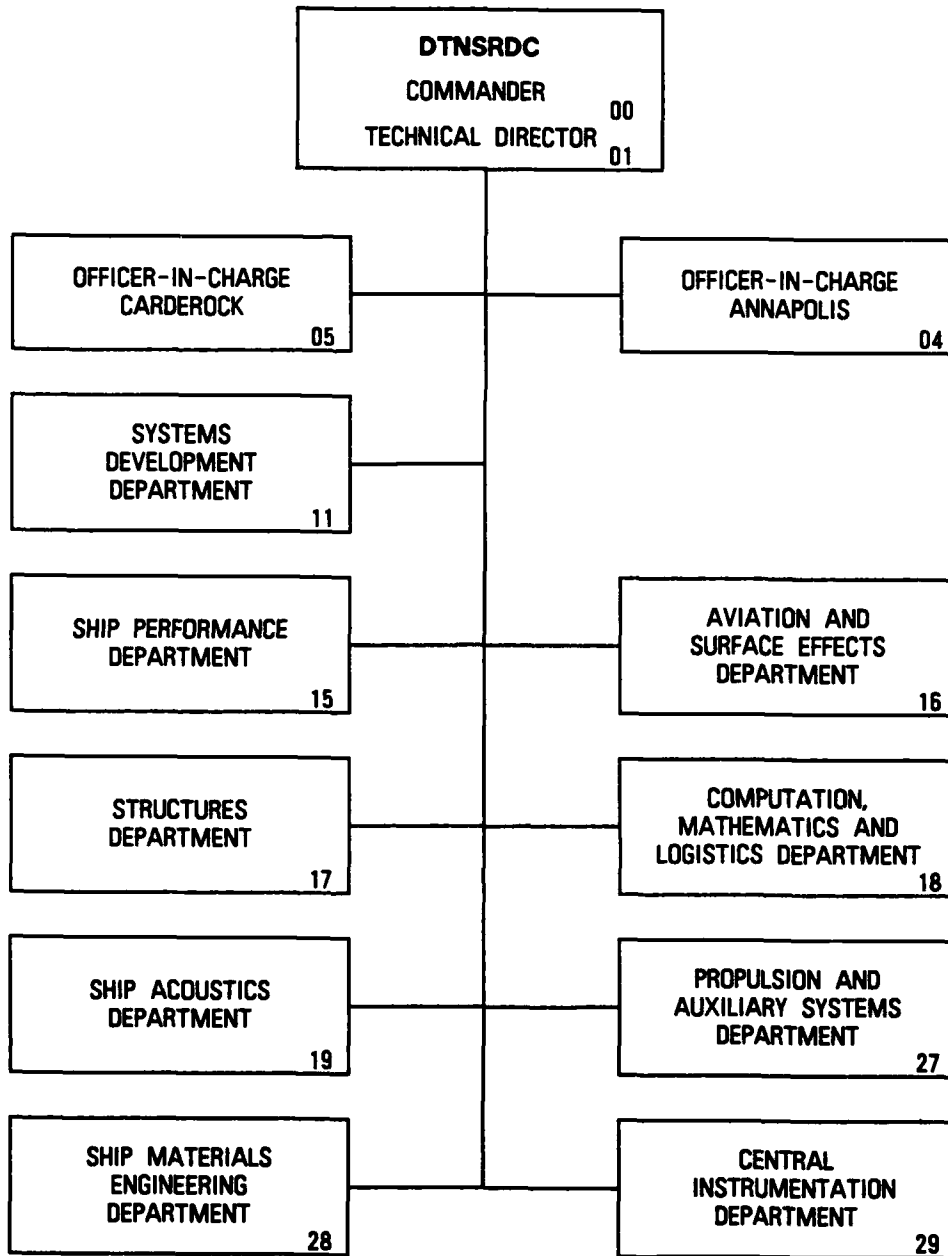
May 1986

TM-18-86-14

AD-A173 582

Computer Center VAXcluster Libraries/PROCFIL (Procedures)

# MAJOR DTNSRDC ORGANIZATIONAL COMPONENTS



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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) <b>The Computer Center DEC VAXcluster Libraries: Proclil (Procedures)</b> <b>VLIB/P, is a reference manual which describes the public-access</b> <b>cataloged procedures (sets of control statements to accomplish a</b> <b>task) developed at DTNSRDC for the DEC VAXcluster. These edited</b> <b>on-line helps include library maintenance, tape utilities, file</b> <b>conversion, system functions, etc. In addition, VLIB/P lists them</b> <b>by functional category and alphabetically with a descriptive title</b> <b>for each.</b> <i>Keywords: computer files &amp; formats;</i>		

\*\*\*\*\*

David W. Taylor  
Naval Ship Research and Development Center  
Bethesda, Maryland 20084-5000

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\* \*  
\* \*  
\* Computer Center \*  
\* DEC VAXcluster \*  
\* Libraries: PROCFIL \*  
\* (Procedures) \*  
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\* \*  
\*\*\*\*\*

\*\*\*\*\*

by  
David V. Sommer

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Questions and requests for more detailed information  
should be directed to Code 1892, Bldg. 17, Rm. 100.

Computation, Mathematics and Logistics Department  
Technical Memorandum

May 1986

TM-18-86-14

## Table of Contents

1	Introduction	
	What's In This Manual	1-1
	Contents	1-2
	Functional Categories	1-4
	List of Routines by Category	1-7
2	Routine documentation	
	How to Get On_line Help	2-1
	<individual HELP modules arranged alphabetically>	2-2 *

## \*\*\* How This Was Prepared \*\*\*

This is a printed document of the on-line help modules available. There has been no attempt to "neaten" them up -- the spacing is as it was designed to be displayed by the VMS HELP program. A procedure and a program were written to extract, arrange and format them.



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A-1	

\* - As new routines are developed, the HELP modules may be printed and inserted into this document.

## \*\*\*\*\* Introduction \*\*\*\*\*

The Computer Center makes available on VAXcluster, in addition to the VMS operating system, a wide variety of both scientific and utility programs, subprograms and procedures. The routines are maintained in libraries or as separate files in the VSYS: directory.

The VLIB-Series consists of the following, which are the helps for the various VAXcluster "libraries" maintained by the Computer Center:

VLIB/D - Computer Center VAXcluster Libraries / DTNSRDC (Commands and General Information)	TM-18-86-12
VLIB/N - Computer Center VAXcluster Libraries / NSRDC (Subprograms)	TM-18-86-13
VLIB/P - Computer Center VAXcluster Libraries / PROCFIL (Procedures)	TM-18-86-14
VLIB/U - Computer Center VAXcluster Libraries / UTILITY (Programs)	TM-18-86-15

## \*\*\* What's In This Manual \*\*\*

A list of the routines with a brief description of each is followed by the list of functional categories used to classify each routine. Next is a list of the routines under the various categories. Chapter 2 contains the currently available HELP modules in alphabetical order.



## \*\*\*\* Contents \*\*\*\*

The following procedures were written at DTNSRDC. For help, type "HELP @PROCFIL routine".

By_Category	List of modules by the functional category to which each belongs.
By_Date	List of modules in reverse order by the date of the last modification to the module or its help.
CALCD2T	Copy Calcomp disk files to tape.
CLASS	Get a description of a class (or a list of classes) offered by the Computer Center.
COMPLIB	Compress a SHARE (object) library.
COMPLIBH	Compress a HELP library.
COMPLIBT	Compress a TEXT library.
COPYD2T	Copy files from disk to a VAX VMS tape.
COPYT2D	Copy all files from a VAX VMS tape to disk.
DELTREE	Delete a directory and its files.
DISLINK	Link .OBJ file and optional libraries with DISSPLA libraries.
ENCIPHER	Encrypt or decrypt a file using a single key.
FLRN	Compile Fortran, Link using subroutine library VSYS:NSRDC and Run.
FOR2LST	Copy file changing record attribute from "Fortran carriage control" to "Carriage return carriage control".
GETCCN	Get a Computer Center Note or the Computer Center Note Index.
GETLIBH	Get all modules from a help library into a .HLP file.
LIBLIST	(Numbered), multi-column list of contents of help, object, share, or text library.
MAKHELP	Generate a skeleton HELP module.
MODH	Modify a help library module using EDT.
MODT	Modify a text library module using EDT.
NEWLIBH	Create a new HELP library from a complete .HLP file.
NONE2LST	Copy file changing record attribute from no carriage control to "Carriage return carriage control".
RENAMET	Rename a TEXT library module.

SET\_PROC\_NAME Set your process name.

SKELCOM Generate a skeleton procedure.

TYPE Type a Fortran carriage control file with overprinting to an auxiliary printer.

WXTAPE Combine files and write to tape for Xerox 8700.

## \*\*\* Functional Categories \*\*\*

The following functional categories are used at DTNSRDC. Those preceded by an asterisk (\*) are local DTNSRDC categories. All others are from VIM (the CDC users group).

- A0 Arithmetic routines
  - A1 Real numbers
  - A2 Complex numbers
  - A3 Decimal
  - A4 I/O routines
- B0 Elementary functions
  - B1 Trigonometric
  - B2 Hyperbolic
  - B3 Exponential and logarithmic
  - B4 Roots and powers
- C0 Polynomials and special functions
  - C1 Evaluation of polynomials
  - C2 Roots of polynomials
  - C3 Evaluation of special functions (non-statistical)
  - C4 Simultaneous non-linear algebraic equations
  - C5 Simultaneous transcendental equations
  - \* C6 Roots of functions
- D0 Operations on functions and solutions of differential equations
  - D1 Numerical integration
  - D2 Numerical solutions of ordinary differential equations
  - D3 Numerical solutions of partial differential equations
  - D4 Numerical differentiation
- E0 Interpolation and approximations
  - E1 Table look-up and interpolation
  - E2 Curve fitting
  - E3 Smoothing
  - E4 Minimizing or maximizing a function
- F0 Operations on matrices, vectors & simultaneous linear equations
  - F1 Vector and matrix operations
  - F2 Eigenvalues and eigenvectors
  - F3 Determinants
  - F4 Simultaneous linear equations
- G0 Statistical analysis and probability
  - G1 Data reduction (common statistical parameters)
  - G2 Correlation and regression analysis
  - G3 Sequential analysis
  - G4 Analysis of variance
  - G5 Time series
  - G6 Special functions (includes random numbers and pdf's)
  - \* G7 Multivariate analysis and scale statistics
  - \* G8 Non-parametric methods and statistical tests
  - \* G9 Statistical inference

- H0 Operations research techniques, simulation & management science
  - H1 Linear programming
  - H2 Non-linear programming
  - H3 Transportation and network codes
  - H4 Simulation modeling
  - H5 Simulation models
  - H6 Critical path programs
  - H8 Auxiliary programs
  - H9 Combined
- I0 Input
  - I1 Binary
  - I2 Octal
  - I3 Decimal
  - I4 BCD (Hollerith)
  - I9 Composite
- J0 Output
  - J1 Binary
  - J2 Octal
  - J3 Decimal
  - J4 BCD (Hollerith)
  - J5 Plotting
  - J7 Analog
  - J9 Composite
- K0 Internal information transfer
  - K1 External-to-external
  - K2 Internal-to-internal (relocation)
  - K3 Disk
  - K4 Tape
  - K5 Direct data devices
- L0 Executive routines
  - L1 Assembly
  - L2 Compiling
  - L3 Monitoring
  - L4 Preprocessing
  - L5 Disassembly and derelativizing
  - L6 Relativizing
  - L7 Computer language translators
- M0 Data handling
  - M1 Sorting
  - M2 Conversion and/or scaling
  - M3 Merging
  - M4 Character manipulation
  - M5 Searching, seeking, locating
  - M6 Report generators
  - M9 Composite
- N0 Debugging
  - N1 Tracing and trapping
  - N2 Dumping
  - N3 Memory verification and searching
  - N4 Breakpoint printing

- 00 Simulation of computers and data processors (interpreters)
  - 01 Off-line equipment (listers, reproducers, etc.)
  - 03 Computers
  - 04 Pseudo-computers
  - 05 Software simulation of peripherals
  - 09 Composite
- P0 Diagnostics (hardware malfunction)
- Q0 Service or housekeeping, programming aids
  - Q1 Clear/reset
  - Q2 Checksum accumulation and correction
  - Q3 File manipulation
  - Q4 Internal housekeeping, save, restore, etc.
  - Q5 Report generator subroutines
  - Q6 Program documentation: flow charts, document standardization
  - Q7 Program library utilities
- R0 Logic and symbolic
  - R1 Formal logic
  - R2 Symbol manipulation
  - R3 List and string processing
  - R4 Text editing
- S0 Information retrieval
- T0 Applications and application-oriented programs
  - T1 Physics (including nuclear)
  - T2 Chemistry
  - T3 Other physical sciences (geology, astronomy, etc.)
  - T4 Engineering
  - T5 Business data processing
  - T6 Manufacturing (non-data) processing and process control
  - T7 Mathematics and applied mathematics
  - T8 Social and behavioral sciences and psychology
  - T9 Biological sciences
  - T10 Regional sciences (geography, urban planning)
  - T11 Computer assisted instruction
- U0 Linguistics and languages
- V0 General purpose utility subroutines
  - V1 Random number generators
  - V2 Combinatorial generators: permutations, combinations & subsets
  - \* V3 standard and special problems
- X0 Data reduction
  - X1 Re-formatting, decommutation, error diagnosis
  - X2 Editing
  - X3 Calibration
  - X4 Evaluation
  - X5 Analysis (time-series analysis)
  - X6 Simulation (generate test data for data reduction system)
- Y0 Installation modification
  - Y1 Installation modification library
  - Y2 NEWPL tape of installation modifications
- Z0 All others

\*\*\*\*\* By Functional Category \*\*\*\*\*  
(25-APR-86 @ 13:11:33)

The modules in this library are listed below by functional category.

(E - executable program; F - function subprogram; P - procedure;  
S - subroutine subprogram; Z - miscellaneous)

J5 Plotting  
P-CALCD2T

K1 External-to-external  
P-COPYD2T P-COPYT2D P-WXTAPE

K3 Disk  
P-COPYD2T P-COPYT2D P-WXTAPE

K4 Tape  
P-COPYD2T P-COPYT2D P-WXTAPE

L0 Executive routines  
P-DISLINK

L2 Compiling  
P-FLRN

M0 Data handling  
P-ENCIPHER

M2 Conversion and/or scaling  
P-FOR2LST P-NONE2LST

O1 Off-line equipment (listers, reproducers, etc.)  
P-LIBLIST P-TYPE

Q0 Service or housekeeping, programming aids  
P-MAKHELP P-SKELCOM

Q4 Internal housekeeping, save, restore, etc.  
P-RENAMET

Q7 Program library utilities  
P-COMPLIB P-COMPLIBH P-COMPLIBT P-GETLIBH P-MODH  
P-MODT P-NEWLIBH

S0 Information retrieval  
P-CLASS P-GETCCN

Z0 All others  
P-SET\_PROC\_

## \*\*\*\*\* Individual Documents \*\*\*\*\*

This chapter contains the HELP modules for all routines and general information in "library" PROCFIL.

For the most recent on-line HELPs, type

HELP @PROCFIL <routine>

To see the current contents, type

HELP @PROCFIL Contents

To see the most recently changed routines of HELPs, type

HELP @PROCFIL By\_Date

To see the current functional category list of the modules, type

HELP @PROCFIL By\_Category

\*\*\*\* CALCD2T \*\*\*\*

Copy Calcomp disk files to tape.

Format:

@VSY:CALCD2T [ slot# [ vsn ] ]

Omitted parameters are prompted for.

slot# is the 1- or 2-digit slot number

vsu is the volume serial number (on sticker on tape)

\*\*\* Admin\_info \*\*\*

Authors: George Smith - DTNSRDC Code 1892.1  
Sharon E. Good - DTNSRDC Code 1892.1  
David V. Sommer - DTNSRDC Code 1892.2

Date written: early 1985 (gs)

Dates revised

? - seg  
04/09/85 - dvs -



## \*\*\*\* CLASS \*\*\*\*

Get a description of a class (or a list of classes) offered by Code 1892.

## Format:

@VSY:CLASS [ <class\_name> ] [ <output\_file> ]

## \*\*\* Parameters \*\*\*

p1 - name of class

If omitted, you will be prompted for it, then enter a carriage return for a list of possible classes.

p2 - optional output file

If omitted, SY\$OUTPUT is used.

## \*\*\* Examples \*\*\*

@VSY:CLASS fortran

@VSY:CLASS a class.lis

<-- "a" is a list of available classes  
output will be in CLASS.LIS

@VSY:CLASS

Class name (RETURN for list of classes):

<-- press RETURN key

Output:

<-- press RETURN key for  
SY\$OUTPUT -or-  
enter a file name

## \*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 02/24/86

Dates revised

\*\*\*\*\* COMPLIB \*\*\*\*\*

Compress a share (object) library. All low versions are purged and the contents of the compressed library are listed.

Format

@VSY:COMPLIB [library\_name] [log]

If library\_name is omitted, you will be prompted for it.

If log is present (non-null), the compression will be logged at your terminal.

\*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 08/19/85

Dates revised

\*\*\*\* COMPLIBH \*\*\*\*

Compress a help library. All low versions are purged and the contents of the compressed library are listed.

Format

@VSY:COMPLIBH [library\_name] [log]

If library\_name is omitted, you will be prompted for it.

If log is present (non-null), the compression will be logged at your terminal.

\*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 06/04/85

Dates revised

\*\*\*\* COMPLIBT \*\*\*\*

Compress a text library. All low versions are purged and the contents of the compressed library are listed.

Format

@VSY:COMPLIBT [library\_name] [log]

If library\_name is omitted, you will be prompted for it.

If log is present (non-null), the compression will be logged at your terminal.

\*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 06/04/85

Dates revised  
06/26/84

\*\*\*\* COPYD2T \*\*\*\*

Copy disk files to a VAX tape. Reads the disk files you specify and uses COPY to write them onto tape. When you are done, it will audit the tape.

Format:

@VSYSCOPYD2T [ slot\_# [ vsn [ density ] ] ]

where

slot\_# is the 1- or 2-digit number of the slot where the tape is stored

vsn is the VSN of the tape

density is the tape density (1600 or 6250; default 1600)

You will then be prompted for the individual files to be copied to the tape. When you are finished, enter an empty line (just carriage return). A directory of the files on the tape will be written on SYSS\$OUTPUT.

Note that the tape will have a standard label for each file you write.

\*\*\* Admin\_info \*\*\*

Author: Sharon E. Good - DTNSRDC Code 1892.1

Date written: 05/08/85

Dates revised

\*\*\*\* COPYT2D \*\*\*\*

Copy a VAX tape to disk. Reads files (high versions only) from a tape written with the VAX VMS COPY command and stores them on disk with the same file name as on the tape.

Format:

@VSYSCOPYT2D [ slot\_# [ vsn [ density ] ] ]

where

slot\_# is the 1- or 2-digit number of the slot where the tape is stored

vsu is the vsu of the tape

density is the tape density (1600 or 6250; default 1600)

\*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 04/03/85

Dates revised  
04/11/85

86/05/30

VAX

PROCFIL

DELTREE

Page 2-9

\*\*\*\* DELTREE \*\*\*\*

Delete a tree of files.

Format:

@VSY:DELTREE directory

where directory is the directory to be deleted.

For example, to delete all the files (including the directory file) in directory A (A.DIR):

@VSY:DELTREE [.a]

\*\*\*\* DISLINK \*\*\*\*

Link input file and libraries to DISSPLA libraries:

Format:

DISLINK [ filename ]

where filename is your .OBJ file to be linked to DISSPLA libraries.  
If omitted, you will be prompted for it.

You are then asked for any additional libraries you want to be searched.

Other libraries (y or n):

If you respond YES, you will be asked for the other libraries. Enter the names of the user or system libraries (e.g., VSYS:NSRDC) in the order you want them to be searched. When you are finished, type a carriage return to indicate there are no more libraries.

Your .OBJ file is then linked with the libraries you listed and with the DISSPLA libraries.

\*\*\* Admin\_info \*\*\*

Author: Kevin Brady - DTNSRDC Code 1892.1

Date written: 05/13/85

Dates revised



\*\*\*\* ENCIPHER \*\*\*\*

Encrypt or decrypt a sequential file using a single key.

Format:

@VSY:ENCIPHER

When prompted, enter:

1. the name of the sequential file (include extenders) to be coded or decoded
2. the name of the coded or decoded result file  
(the default is "filename".COD)
3. the keyword.

\*\*\* Examples \*\*\*

1. Encrypt file MYFILE.DAT creating file MYFILE.COD using the key MYKEY:

```
@VSY:ENCIPHER
MYFILE.DAT
<CR>
MYKEY
```

2. Decrypt the above coded file creating file MYNEWFILE.DAT:

```
@VSY:ENCIPHER
MYFILE.COD
MYNEWFILE.DAT
MYKEY
```

Note that the same key is used for both coding and decoding.

For additional levels of encryption, just re-execute with additional keys. To decode, re-execute with the keys in reverse order.

\*\*\* Admin\_info \*\*\*

Obtained from: DECUS Fall '84 tape

Author: P. Lind

Date written: 1982 or earlier

Dates revised  
Oct 84

86/05/30

VAX

PROCFIL

ENCIPHER

Page 2-12

Notes:

The source program for the encryption routine is not available.

\*\*\*\* FLRN \*\*\*\*

Compile Fortran, Link using subroutine library VSYS:NSRDC and Run.

Format:

@VSYS:FLRN [ file-name ]

If file-name is omitted, you will be prompted for it.

For execution, FOR005, FOR006 and SYSSINPUT are assigned to the terminal. Thus, all Fortran READ, PRINT, READ (5,..., WRITE (6,..., TYPE, and ACCEPT statements will read from or write to the terminal.

Ignore the system message "previous value of SYSSINPUT has been superseded".

\*\*\* Admin\_info \*\*\*

Authors: David V. Sommer - DTNSRDC Code 1892.2  
Sharon E. Good - DTNSRDC Code 1892.1

Date written: 02/21/85 (dvs)

Dates revised

03/05/85 - seg  
05/29/85 - dvs

\*\*\*\* FOR2LST \*\*\*\*

Copy a file changing the carriage control attribute from "Fortran" to "carriage return". This is needed so that files without carriage control characters in column 1 (such as the output of a Fortran program) will have column 1 printed instead of interpreted as carriage control.

#### Format

@VSY:FOR2LST [ file-spec ]

If file-spec is omitted, you will be prompted for it.

The converted file will be a new version of the same file-spec.

See DTNSRDC utility program LST2FOR to go in the other direction.

\*\*\* Admin\_info \*\*\*

Author: Sharon E. Good - DTNSRDC Code 1892.2

Date written: 03/15/85

Dates revised

\*\*\*\* GETCCN \*\*\*\*

Get a Computer Center Note or the Index.

Format:

@VSY:GETCCN vv nn [ output\_file-spec ]

-or-

@VSY:GETCCN INDEX

The Computer Center Note file starts with Vol. 01, No. 02.

\*\*\* Parameters \*\*\*

For an individual Center Note:

p1 - vv - the volume number

p2 - nn - the issue number

p3 - the (optional) name of the file to receive the CCN  
(if omitted, CCNvvnn.TXT is used)

For the Center Note Index (by number and by topic):

p1 - INDEX

\*\*\* Examples \*\*\*

1) Get Center Note 17.03:

@VSY:GETCCN 17 03

Your file CCN1703.TXT will contain the extracted CCN with carriage return carriage control.

## 2) Get the Index:

@VSY:GETCCN INDEX

The Index will be in your file CCN\_INDEX.LIS with Fortran carriage control.

\*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 09/20/85

Dates revised

11/07/85 - add INDEX option

\*\*\*\* GETLIBH \*\*\*\*

Get all modules from a help library (.HLB) into a .HLP file.

Format

@VSY:GETLIBH [library\_name]

If library\_name is omitted, you will be prompted for it.

All help modules are extracted from library\_name.HLB and put into file library\_name.HLP. After making any desired changes to the .HLP file, use procedure NEWLIBH to create a new .HLB library.

\*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 03/27/85

Dates revised

04/09/85

06/27/85

## \*\*\*\* LIBLIST \*\*\*\*

Produce a multi-column (numbered) list of the contents of a HELP, OBJECT, SHARE, or TEXT library. This does a LIBRARY/LIST and reformats the output using program VSYS:LISTLIB.

## Format:

@LIBLIST library type output numbered? separation

Note that this procedure will define a command called LISTLIB which will be active until logout.

## \*\*\* Parameters \*\*\*

- p1 - library - the name of the library
- p2 - type - the type of the library  
H or HELP  
O or OBJECT  
S or SHARE  
T or TEXT
- p3 - output - the output file  
(if omitted, SYSSOUTPUT is used)
- p4 - numbered? - Y, YE, YES for a numbered list  
anything else for an unnumbered list  
(the default is a numbered list)
- p5 - separation - number of spaces between columns  
(the default is 3)

Note that if p2 is given, then the specified or default values for p3, p4 and p5 are used. If p2 is omitted, you will be prompted for the remaining parameters.

## \*\*\* Examples \*\*\*

1. Get a numbered list of my text library MYLIB.TLB at the terminal:  
  
@VSYS:LIBLIST MYLIB TEXT
2. Get a numbered list of my help library MYLIB.HLP in file MYLIB.LIS leaving 8 spaces between columns so I can make notes:  
  
@VSYS:LIBLIST MYLIB HELP MYLIB.LIS YES 8
3. Get an unnumbered list of my object library MYLIB.OLB at the terminal:



86/05/30

VAX

PROCFIL

LIBLIST

Page 2-19

@VSY:LIBLIST MYLIB O SYSS\$OUTPUT NO

\*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 12/04/85

Dates revised

\*\*\*\* MAKHELP \*\*\*\*

Generate a skeleton help module.

Format:

@VSY:MAKHELP module\_name type

where module\_name is one of:

- the name of the help module  
(the skeleton help will be in file module\_name.HLP)
- ? or HELP for help

type is the type of help -- one of:

- 1 or PROGRAM - an executable program
- 2 or SUBPROGRAM - a function or subroutine subprogram
- 3 or PROCEDURE - a DCL procedure
- 4 or GENERAL - a general help
- 0 or QUIT - quit now - don't generate file

\*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 06/24/85

Dates revised

- 01/10/86 - add ?/HELP for module\_name
- add QUIT as synonym for type "0"
- allow minimum abbreviations for Help, PROGram, Subprogram, PROCedure, General, and Quit

## \*\*\*\* MODH \*\*\*\*

Modify a help library module (extract module into file, EDT to modify, replace old module).

## Format:

@VSY:MODH library\_spec module\_name

## \*\*\* Parameters \*\*\*

p1 - library\_spec - file specification of the help library  
(Default file type: .HLB)

p2 - module\_name - name of the module to be modified

## \*\*\* Example \*\*\*

Modify module MODULE\_TO\_FIX in MYHELPLIB.HLB:

```
@VSY:MODH myhelplib module_to_fix
<EDT commands to modify the module>
^Z
exit
```

## \*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 10/14/85

Dates revised

10/21/85

04/25/85

\*\*\*\* MODT \*\*\*\*

Modify a text library module (extract module into file, EDT to modify, replace old module).

Format:

@VSYS:MODT library\_spec module\_name

\*\*\* Parameters \*\*\*

p1 - library\_spec - file specification of the text library  
(Default file type: .HLB)

p2 - module\_name - name of the module to be modified

\*\*\* Example \*\*\*

Modify module MODULE\_TO\_FIX in MYTEXTLIB.HLB:

```
@VSYS:MODT mytextlib module_to_fix
<EDT commands to modify the module>
^Z
exit
```

\*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 10/14/85

Dates revised  
10/21/85  
04/25/85

## \*\*\*\* NEWLIBH \*\*\*\*

Create a new help library from a complete .HLP file. All low versions are purged and the contents of the new library are listed.

## Format

@VSY:NEWLIBH [library\_name]

If library\_name is omitted, you will be prompted for it.

Procedure GETLIBH may be used to extract all help modules from an existing help library. After modification of this extracted file, this procedure (NEWLIBH) may be used to create a new help library.

## \*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 03/15/85

Dates revised  
05/29/85

86/05/30

VAX

PROCFIL

NONE2LST

Page 2-24

\*\*\*\* NONE2LST \*\*\*\*

Use the TECO editor to convert a file from no carriage control to one with carriagereturn carriage control.

Format:

@VSY: NONE2LST file\_spec

The converted file will be the next version of <file\_spec>.

\*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 06/27/85

Dates revised

## \*\*\*\* RENAMET \*\*\*\*

Rename a module in a text library.

Format:

@VSY:RENAMET library old\_name new\_name [ LOG ] [ LIST ]

This is accomplished by extracting module old\_name into new file TEMP.TMP; adding it to the library as new\_name; deleting module old\_name and the file TEMP.TMP.

## \*\*\* Parameters \*\*\*

p1 - the text library name

p2 - the name of the existing module to be renamed

p3 - the new name for the module

(non-fatal error if p3 = p2; in this case, no rename is done)

p4/p5 - LOG to log the processing at the terminal

- LIST to give a full list of the library contents

## \*\*\* Examples \*\*\*

1) Rename module MYPROG in library MYLIB to MYPROG.MAR:

@VSY:RENAMET mylib myprog myprog.mar

2) As above, but log it at the terminal and list the library contents:

@VSY:RENAMET mylib myprog myprog.mar LOG LIST

3) Rename module MYPROG in library MYLIB to MYPROG:

@VSY:RENAMET mylib myprog myprog

%RENAMET-W-NEWEQOLD, new name same as old (MYPROG)

No rename is done.

## \*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 10/08/85

86/05/30

VAX

PROCFIL

RENAMET

Page 2-26

Dates revised



## \*\*\*\* SET\_PROC\_NAME \*\*\*\*

Set your process name to a 1- to 15-character string.

Format:

```
@VSY:SET_PROC_NAME "name" [ show ]
```

If the above statement is in your LOGIN.COM file, then when you initially log in, your process name will be set to "name". If you do another login (SET HOST) during the session, it will be set to "name\_2". Similarly, additional nested logins will have the process names "name\_3", "name\_4", etc.

## \*\*\* Parameters \*\*\*

- p1 - the desired process name. If any blanks or special characters, enclose the string in quotes ("...").
- p2 - omitted or N or NO - do not show the process name  
anything else - show the process name

## \*\*\* Example \*\*\*

Put the following into your LOGIN.COM file:

```
$ @VSY:SET_PROC_NAME "Your Name" SHOW
```

Then, each time you log in, your process name will be set to "Your Name", "Your Name\_2", "Your Name\_3", ..., depending upon the nesting of your logins.

## \*\*\* Admin\_info \*\*\*

Authors: Kevin Brady - DTNSRDC Code 1892.1  
David V. Sommer - DTNSRDC Code 1892.2

Date written: 12/06/85

Dates revised

\*\*\*\* SKELCOM \*\*\*\*

This procedure will generate a skeleton procedure. Comments are generated at the start for a description of any parameters, and at the end for administrative information. Code is generated to test the presence of any required parameters. This is designed to take some of the drudgery out of creating a new procedure.

Format:

```
@VSY:SKELCOM  proc_name  #_req_params
```

\*\*\* Parameters \*\*\*

```
@VSY:SKELCOM  proc_name  #_req_params
```

proc\_name is the name of the procedure. The generated procedure will be in file proc\_name.COM.

#\_req\_params is the number of required parameters (0-8).

\*\*\* Example \*\*\*

```
@VSY:SKELCOM  proc_name  #_req_params
```

Generate a skeleton procedure named MYPROC with one required parameter:

```
@VSY:SKELCOM  myproc  1
```

File MYPROC.COM will contain:

```
$! MYPROC : . (1)
$!
$! pl - . (2)
$!
$! getpl: (3)
$   if pl .nes. "" then goto plok (3)
$   inquire pl "" (3)
$   goto getpl (3)
$! plok: (3)
$! (3)
$ on error then goto cleanup (4)
$ on control_y then goto cleanup (4)
$ assign TT sys$input (4)
$ run ? (4)
$!
$ cleanup:
$   on error then exit (5)
$   on control_y then exit (5)
$   exit (5)
$!
```

\$! created 05/22/85 by AMDS  
\$! last modified 05/22/85 @ 1052 by AMDS  
\$!  
\$! end of MYPROC

- (1) - Add a brief statement of what the procedure does.
- (2) - Add a brief description of the required parameter.  
(One of these lines is generated for each required parameter.  
Be sure to add descriptions of any optional parameters.)
- (3) - Loop to test for the presence of the required parameter. Add an appropriate prompt message in the third line.
- (4) - Body of the procedure. Delete or modify as appropriate.
- (5) - Termination section. Undo any global changes you may have made, etc.  
Exits before processing the trailing comments.

\*\*\* Admin\_info \*\*\*

Author: David V. Sommer - DTNSRDC Code 1892.2

Date written: 06/24/85

Dates revised

12/02/85 - Add EXIT and move history comments to end of procedure so  
they won't get processed by DCL.

## \*\*\*\* TYPE \*\*\*\*

Type a file to an auxiliary printer.

Format:

@VSY:TYPE file\_spec

This is for use with a file having Fortran carriage control and overprinted lines ('+' in column 1). If the file does not use '+' carriage control, then use the AUXPRINT command.

## \*\*\* Parameters \*\*\*

p1 - file\_spec of the file to be TYPEd

## \*\*\* Example \*\*\*

File OVERPRINT.LIS has the record attribute "Fortran carriage control" and has the following lines:

1...5...10...15...

This is a line with the next word underlined.

+

To type on the screen:

TYPE OVERPRINT

To type on the auxiliary printer:

@VSY:TYPE OVERPRINT

## \*\*\* Admin\_info \*\*\*

Author: David V. Sommer

Date written: 01/06/86

Dates revised

## \*\*\*\* WXTAPE \*\*\*\*

Procedure to mount a tape and run program VLASER to combine one or more files into a single file for processing on the Xerox 8700.

Xerox DJDE records are generated by the program, if they are not already in the file. (A DJDE record contains Xerox 8700 control information. Such records are not printed, but dynamically modify the printing environment for the records which are subsequently printed.)

## Format:

@VSY:WXTAPE slot vsn

where slot is the slot number where the tape is stored  
vsn is the Volume Serial Number of the tape

If these are omitted, you will be asked for them.

After the tape has been mounted, program vlaser is executed and you will be prompted for all required information.

[mIf you wish to run the program directly to make a disk file and then [Om  
[muse procedure @VSY:CALCD2T to write it to tape, use RUN VSY:VLASER. [Om  
[mType HELP VLASER. [Om

Files with the record attribute "Fortran carriage control" are assumed to have carriage control characters in column 1. Files with the record attribute "carriage return carriage control" are assumed to have data starting in column 1. If your file does not have the correct record attribute, use program VSY:LST2FOR (HELP LST2FOR) or procedure @VSY:FOR2LST (HELP for2lst) or procedure @VSY:NONE2LST (HELP NONE2LST) to change it.

## \*\*\* Data\_entries \*\*\*

If you need help for any question asked by VLASER, enter ? or HELP.

The response to every prompt (except file name) may be entered in upper or lower case and may be abbreviated by as few as one character.

Paper: - Enter 3-HOLE or PLAIN.  
This will apply to the entire run.  
(Default: 3-HOLE)

Duplex for job? - Enter YES if you want DUPLEX=YES for all files.  
Enter NO if you want DUPLEX=NO for all files.  
Enter BOTH if you want to be asked for each file.  
If you have only one file to process, it doesn't matter how you respond.  
(Default: YES)

File: - Enter the name of the (next) file to be copied.  
Enter CTRL-Z or <cr> to indicate that no more files

are to be processed.

Is/are the DJDE record(s) already in the file?

- Respond YES or NO.

<for all but the first file>

The last DJDE was:

<djde record>

Do you want to use the same one?

- Respond YES or NO. If NO, you will be prompted  
for each DJDE parameter.

<prompts for DJDE parameters>

Xerox jobname: - 6 characters maximum

(Computer Center-defined jobnames are recognized.  
If you type some other jobname, you will be asked  
to verify it. This will give you an opportunity  
to correct a misspelling.)  
(Default: STDLND)

Number of copies:

- up to 3 digits  
(default: 001)

Duplex?

- Asked only if you responded BOTH to the second prompt.  
- Enter YES or NO  
(Default: YES)

Forms:

- Enter the name of the dynamic forms overlay to be used  
for this file.  
(Computer Center-defined forms names are recognized.  
If you type some other jobname, you will be asked to  
verify it. This will give you an opportunity to  
correct a misspelling.)  
(Default: no FORMS= parameter is generated)

Do you want SIDE=NUFRONT?

- Respond YES if you want to force the next page to be  
printed on a new sheet of paper.  
Respond NO if you want to let the Xerox 8700 decide  
for itself.  
(Default: YES)

Is this DJDE to be used for all remaining files?

- Enter YES or NO. If you do not answer YES, you will be  
asked for each file.

(If you have only file to process, it doesn't matter how you respond.)

<for all but the first file>

Do you want a banner page for this file?

- Enter YES or NO. The first banner page will be blue. Other banner pages will be white, but will have a border on both sides to help locate it.

**\*\* Paper \*\***

Your Xerox 8700 output may be on plain paper or 3-hole punched paper.

Enter either 3-HOLE (or <cr>) or PLAIN.

**\*\* Duplex \*\***

DUPLEX=YES means print on both sides of each sheet of paper.

DUPLEX=NO means print on only one side (simplex).

We do NOT recommend mixing duplex and simplex printing within a given Xerox job because the Xerox 8700 operator must change the paper orientation for each duplex/simplex change and the first page of the new setting may not be what you want.

You are asked at the start if you want everything to be done duplex or simplex. If you really want to mix them, enter BOTH to the first duplex prompt. You will then be asked each time we create a new DJDE record.

**\*\* File\_name \*\***

The name of the (next) file to be processed is any valid file specification.

**\*\* In-file\_DJDE \*\***

If the DJDE records are already in the file, respond YES when asked.

If they are not in the file, respond NO and we will create one.

**\*\* Use\_last\_DJDE \*\***

If you have more than one file and the DJDE record(s) are not in the next file, you are given the opportunity to use the last DJDE record we generated. Note that I only know the last DJDE record we created, not

any which may be embedded in an earlier file.

**\*\* Job\_name \*\***

The Xerox jobname is the name of the job on the Xerox 8700 which will be used to process the file.

The job names I recognize are listed below. If you type something else (whether a different valid job name or a misspelling) I will ask you about it. If it is valid, enter it again as verification. If it was a misspelling, enter the correct spelling. Entering just <cr> will indicate the default, which is STDLND.

Landscape refers to a page orientation where the printed lines are parallel to the long side of the page.

Portrait refers to a page orientation where the printed lines are parallel to the short side of the page.

2-up is a term used to denote 2 pages of standard printout appearing on one side of a page in a portrait orientation.

2-across is a term used to denote two portrait pages appearing on one side of a page in a landscape orientation.

**Landscape:**

- STDLND - standard landscape job (default),
  - carriage control (CC) character plus 136 characters by 64 lines
  - (good for standard printouts)
- LN8LND - 8 lpi landscape job
  - CC character + 136 data characters by 86 lines
- 2ACLND - 2-across landscape job
  - 2 \* (CC character + 66 data characters) by 60 lines
- BANNER - shaded border both sides
  - two pages must be provided, each starting with a '1' in



column 1

- a '2' in column 138 will print large letters

#### Portrait:

- STDPRT - standard portrait job
  - CC character + 72 data characters by 64 lines
- ST3PRT - 3rd standard portrait job
  - CC character + 94 data characters by 64 lines  
(very large margins)
- ST4PRT - 4th standard portrait job
  - CC character + 87 data characters by 64 lines  
(general documentation; manuals)
- DOCPRT - document/manual portrait job
  - CC character + 87 data characters by 64 lines  
(A '.' in column 76 of top-of-page line forces page onto front side)
- VAXDOC - like ST4PRT, except each page has exactly 66 lines  
(blank carriage control on all lines)
- DD1473 - Standard Form DD-1473
  - both sides of the form are required (each begins with a '1' in column 1)

#### Portrait (2-up):

- 2UPPRT - 2-up portrait job
  - CC character + 136 data characters by 128 lines  
(good for compact storage of standard printout)
- 2U8PRT - (8 lpi) - 2-up portrait job
  - CC character + 136 data characters by 176 lines  
(good for compact storage of standard printout)
- 2UCPRT - 2-up portrait job
  - CC character + 136 data characters by 132 lines  
(like 2UPPRT, but continuous output;  
good for 2-page printer plots)

\* BANNER\_sample \*

The following is the standard first banner for each job:

1...5...10...15...20...25...30...35...40...45...50...55...60...65...70  
<DJDE> JDE=BANNER,OTEXT='<<< LOAD 3-HOLE PAPER - DUPLEX >>>,WAIT...

1  
-  
-  
-

DAVID W. TAYLOR NAV ...  
BETHESDA, MAR ...

-  
-  
-  
-  
-

AMDS 29-AUG-1985 XEROX 8700 ... <<col 138>> 2

1

\*\* Copies \*\*

The number of copies is 1-3 digits. Leading spaces and zeros are ignored. If you want only one copy, enter just <cr>.

\*\* Overlay\_forms \*\*

If a previous DJDE specified a FORMS parameter and you wish to use no special forms, enter NONE.

If you want the current form to be used, enter just <cr> and the FORMS parameter will not be included in the generated DJDE.

The forms names I recognize are listed below. If you type something else (whether a different valid forms name or a misspelling), I will ask you about it. If it is valid, enter it again as verification. If it was a misspelling, enter the correct spelling.

Landscape refers to a page orientation where the printed lines are parallel to the long side of the page.

Portrait refers to a page orientation where the printed lines are parallel to the short side of the page.

2-up is a term used to denote 2 pages of standard printout appearing on one side of a page in a portrait orientation.

NONE no forms overlay

Landscape:

FRAME1 box around page (1 solid line)  
FRAME2 box around page (2 solid lines)  
FRAME3 box around page (3 solid lines)  
FRAME4 box around page (1 solid/shaded line)  
  
2UPL1 solid line dividing two pages  
2UPB1 solid boxes drawn around two pages  
2UPL2 double solid lines dividing two pages

Portrait:

FRAMP1 box around page (1 solid line)  
FRAMP2 box around page (2 solid lines)  
FRAMP3 box around page (3 solid lines)  
FRAMP4 box around page (1 solid/shaded line)  
  
2UP3L triple solid lines dividing two pages  
2UPSL single shaded line dividing two pages  
2UPSB shaded bar dividing two pages  
2UPB2 two separate solid line on a page  
  
WEEKLY checklist by days

**\*\* New-page\_force \*\***

If you want to force the first page of the file onto a new sheet of paper, respond YES when asked "Do you want SIDE=NUFRONT?"

If you want to let the Xerox determine where it should be printed, respond NO.

Note that if you mix duplex and simplex, each time you change, the next page will be forced onto a new sheet.

**\*\* All\_files\_DJDE \*\***

After we have created a new DJDE, you will be asked if you want it to be used for all remaining files. Respond YES or NO as you wish.

You will also be asked this if you are re-using the last DJDE.

Of course, if you have only one file, it doesn't matter which response you give.

\*\*\* Admin\_info \*\*\*

Authors: David V. Sommer - DTNSRDC Code 1892.2  
Sharon E. Good - DTNSRDC Code 1892.1

Date written: 08/29/85

Dates revised

## \*\*\*\*\* Index \*\*\*\*\*

CALCD2T .....	2-2
Admin_info .....	2-2
CLASS .....	2-3
Parameters .....	2-3
Examples .....	2-3
Admin_info .....	2-3
COMPLIB .....	2-4
Admin_info .....	2-4
COMPLIBH .....	2-5
Admin_info .....	2-5
COMPLIBT .....	2-6
Admin_info .....	2-6
COPYD2T .....	2-7
Admin_info .....	2-7
COPYT2D .....	2-8
Admin_info .....	2-8
DELTREE .....	2-9
DISLINK .....	2-10
Admin_info .....	2-10
ENCIPHER .....	2-11
Examples .....	2-11
Admin_info .....	2-11
FLRN .....	2-13
Admin_info .....	2-13
FOR2LST .....	2-14
Admin_info .....	2-14
GETCCN .....	2-15
Parameters .....	2-15
Examples .....	2-15
Admin_info .....	2-16
GETLIBH .....	2-17
Admin_info .....	2-17
LIBLIST .....	2-18
Parameters .....	2-18
Examples .....	2-18
Admin_info .....	2-19

MAKHELP .....	2-20
Admin_info .....	2-20
MODH .....	2-21
Parameters .....	2-21
Example .....	2-21
Admin_info .....	2-21
MODT .....	2-22
Parameters .....	2-22
Example .....	2-22
Admin_info .....	2-22
NEWLIBH .....	2-23
Admin_info .....	2-23
NONE2LST .....	2-24
Admin_info .....	2-24
RENAMET .....	2-25
Parameters .....	2-25
Examples .....	2-25
Admin_info .....	2-25
SET_PROC_NAME .....	2-27
Parameters .....	2-27
Example .....	2-27
Admin_info .....	2-27
SKELCOM .....	2-28
Parameters .....	2-28
Example .....	2-28
Admin_info .....	2-29
TYPE .....	2-30
Parameters .....	2-30
Example .....	2-30
Admin_info .....	2-30
WXTAPE .....	2-31
Data_entries .....	2-31
Paper .....	2-33
Duplex .....	2-33
File_name .....	2-33
In-file_DJDE .....	2-33
Use_last_DJDE .....	2-33
Job_name .....	2-34
BANNER_sample .....	2-35
Copies .....	2-36
Overlay_forms .....	2-36
New-page_force .....	2-37
All_files_DJDE .....	2-37
Admin_info .....	2-38

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